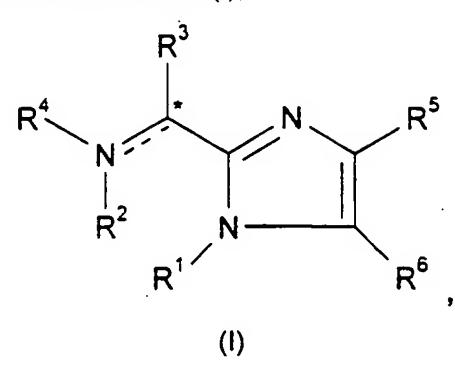
CLAIMS

What is claimed is:

1. A compound of the formula (I),





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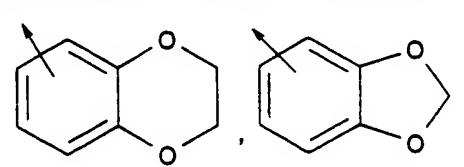
the racemic-diastereomeric mixtures and optical isomers of said compound of formula (I), the pharmaceutically-acceptable salts and prodrugs thereof or a pharmaceutically acceptable salt thereof,

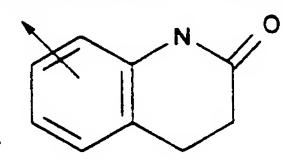
10 wherein

---- represents an optional bond;

R¹ is H, -(CH₂)_m-C(O)-(CH₂)_m-Z¹, -(CH₂)_m-Z¹, -(CH₂)_m-O-Z¹ or -(C₀-C₆)alkyl-C(O)-NH-(CH₂)_m-Z³;

 Z^1 is an optionally substituted moiety selected from the group consisting of (C_{1-1}) alkyl, benzo[b]thiophene, phenyl, naphthyl, benzo[b]furanyl, thiophene,





isoxazolyl, indolyl,

 R^2 is H or (C_1-C_6) alkyl;

or R¹ and R² are taken together with the nitrogen atoms to which they are attached to form a compound of formula (Ia), (Ib) or (Ic),

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 R^3 is -(CH₂)_m-E-(CH₂)_m-Z²;

E is O, S,-C(O)-, -C(O)-O-, -NH-C(O)-O- or a bond;

WO 99/64401 PCT/US99/12760

 Z^2 is H, (C_1-C_{12}) alkyl, amino, (C_1-C_{12}) alkylamino, N,N-di- (C_1-C_{12}) alkylamino, (C_1-C_{12}) alkylguanidino, or an optionally substituted moiety selected from the group consisting of phenyl, indolyl, imidazolyl, thiophene, benzothiophene, pyridinyl and naphthyl;

5 R^4 is H or -(CH₂)_m-A¹;

 A^1 is $-C(=Y)-N(X^1X^2)$, $-C(=Y)-X^2$, $-C(=NH)-X^2$ or X^2 ;

Y is O or S;

 X^1 is H, (C_1-C_{12}) alkyl, $-(CH_2)_m$ -NH- (C_1-C_6) alkyl, $-(CH_2)_m$ -N-di- (C_1-C_6) alkyl or $-(CH_2)_m$ -aryl;

10 X^2 is $-(CH_2)_m-Y^1-X^3$ or optionally substituted (C_1-C_{12}) alkyl;

 Y^1 is O, S, NH, C=O, (C₂-C₁₂)alkenyl having one or more double bonds, -NH-CO-, -CO-NH-, -NH-CO-O-(CH₂)_m-, -C≡C-, SO₂ or a bond;

 X^3 is H, an optionally substituted moiety selected from the group consisting of (C_1-C_{12}) alkyl, (C_3-C_8) cycloalkyl, (C_1-C_{12}) alkoxy, aryloxy, (C_1-C_{12}) alkylamino, $N_1-M_2-M_3$ alkylamino, $N_1-M_3-M_3$ alkoxy, pyrrolidinyl, pyridinyl, pyridinyl, pyridinyl, pyrimidinyl, isoquinolinyl, $N_1-M_3-M_3$ alkylamino, pyrimidinyl, isoquinolinyl, isoqui

or X^1 and X^2 are taken together with the nitrogen to which they are attached to form an optionally substituted moiety selected from the group consisting of thiazolyl

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 Y^2 is CH-X⁴, N-X⁴, -C(X⁴X⁴), O or S;

X⁴ for each occurrence is independently -(CH₂)_m-Y³-X⁵;

 Y^3 is -C(O)-, -C(O)O- or a bond;

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 X^5 is hydroxy, (C_1-C_{12}) alkyl, amino, (C_1-C_{12}) alkylamino, N,N-di- (C_1-C_{12}) alkylamino, or an optionally substituted moiety selected from the group consisting of aryl, aryl (C_1-C_4) alkyl, furanyl, pyridinyl, indolyl, -CH(phenyl)₂,

R⁵ is (C₁-C₁₂)alkyl, (C₀-C₆)alkyl-C(O)-O-Z⁵, (C₀-C₆)alkyl-C(O)-NH-(CH₂)_m-Z³ or optionally substituted aryl;

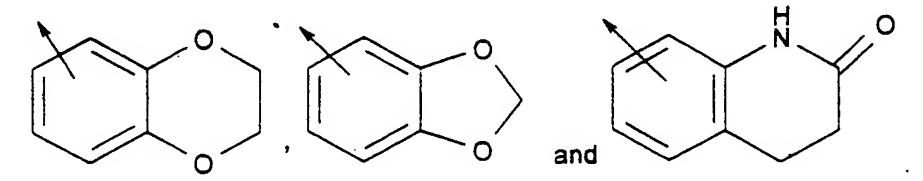
 Z^3 for each occurrence is independently amino, (C_1-C_{12}) alkylamino, $N_1-C_1-C_1-C_1$ alkylamino, $N_1-C_1-C_1-C_1$ alkylamino, $N_1-C_1-C_1-C_1$ alkylamino, $N_1-C_1-C_1-C_1$ alkylamino, $N_1-C_1-C_1$ alkylamino, $N_1-C_1-C_1$ alkylamino, $N_1-C_1-C_1$ alkylamino, $N_1-C_1-C_1$ alkylamino, $N_1-C_1-C_1$ an optionally substituted moiety selected from the group consisting of imidazolyl,

15 • pyridinyl, morpholino, piperidinyl, piperazinyl, pyrazolidinyl, furanyl and thiophene;

R⁶ is H or (C₁-C₆)alkyl;

 R^7 is (C_1-C_{12}) alkyl or $-(CH_2)_m-Z^4$;

Z⁴ is an optionally substituted moiety selected from the group consisting of phenyl, naphthyl, indolyl, thiophene, benzo[b]furan, benzo[b]thiophene, isoxazolyl,



 Z^5 is H, (C_1-C_{12}) alkyl, $(CH_2)_m$ -aryl;

wherein an optionally substituted moiety is optionally substituted by one or more substituents, each independently selected from the group consisting of Cl, F, Br, I, CF₃, CN, N₃, NO₂, OH, SO₂NH₂, -OCF₃, (C₁-C₁₂)alkoxy, -(CH₂)_m-phenyl-(X⁶)_n, -S-phenyl-(X⁶)_n, -S-(C₁-C₁₂)alkyl, -O-(CH₂)_m-phenyl-(X⁶)_n, -(CH₂)_m-C(O)-O-(C₁-C₆)alkyl, -(CH₂)_m-C(O)-(C₁-C₆)alkyl, -O-(CH₂)_m-NH₂, -O-(CH₂)_m-NH-(C₁-C₆)alkyl, -O-(CH₂)_m-N-di-((C₁-C₆)alkyl) and -(C₀-C₁₂)alkyl-(X⁶)_n;

 X^6 for each occurrence is independently selected from the group consisting of hydrogen, CI, F, Br, I, NO₂, N₃, CN, OH, -CF₃, -OCF₃, (C₁-C₁₂)alkyI, (C₁-C₁₂)alkoxy, -(CH₂)_m-NH₂, -(CH₂)_m-NH-(C₁-C₆)alkyI, -(CH₂)_m-N-di-((C₁-C₆)alkyI) and -(CH₂)_m-phenyI;

m for each occurrence is independently 0 or an integer from 1 to 6; and n for each occurrence is independently an integer from 1 to 5; provided that:

- (a) when R^5 is (C_1-C_{12}) alkyl, or $-C(O)-O-Z^5$ and Z^5 is (C_1-C_{12}) alkyl or optionally substituted aryl; R^6 is H or (C_1-C_6) alkyl; R^7 is (C_1-C_{12}) alkyl or Z^4 and Z^4 is thiophene or optionally substituted phenyl, then R^3 is not $-C(O)-O-(CH_2)_m$ -Z where m is 0 and Z is H or (C_1-C_{12}) alkyl or where m is 1 to 6 and Z is H;
- (b) when R^5 is (C_1-C_{12}) alkyl or optionally substituted phenyl; R^6 is H or (C_1-C_6) alkyl; R^7 is (C_1-C_{12}) alkyl and R^3 is $-O-(CH_2)-Z^2$, then Z^2 is not an optionally substituted moiety selected from the group consisting of phenyl, indolyl, imidazolyl, thiophene, benzothiophene, pyridinyl, and naphthyl; and
- (c) when R^5 is H or (C_1-C_{12}) alkyl; R^6 is (C_1-C_6) alkyl; R^7 is (C_1-C_{12}) alkyl; and R^3 is $-O-Z^2$ or $-S-Z^2$, then Z^2 is not an optionally substituted moiety selected from the group consisting of phenyl, naphthyl, thiophene, benzothienyl and indolyl.
- A compound according to claim 1 wherein R¹ is H; R² is H; R³ is -CH₂ phenyl; R⁴ is -(CH₂)_m-A¹ where m in the definition of R⁴ is 0; R⁵ is phenyl; R⁶ is H;
 wh re A¹ is -C(=Y)-N(X¹X²);

Y is O; X¹ is H or methyl;

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 X^2 is $-(CH_2)_m-Y^1-X^3$;

m in the definition of X² is 0, 1, 2 or 3; Y¹ is a bond or O; and X³ is N-methylpyrrolidin-2-yl, diethylamino, pyridinyl, thiophene, imidazolyl, diethoxymethyl, 1-benzyl-piperidin-4-yl, optionally substituted phenyl or

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3. A compound according to claim 1 wherein R^1 is H; R^2 is H; R^3 is $-CH_{2^+}$ phenyl; R^4 is $-(CH_2)_m$ -A¹ where m in the definition of R^4 is 0; R^5 is phenyl; R^6 is H; where A¹ is -C(=Y)-N(X¹X²);

Y is O;

X¹ is benzyl and X² is 2-hydroxyethyl;

or X1 and X2 are taken together with the nitrogen atom to which they are

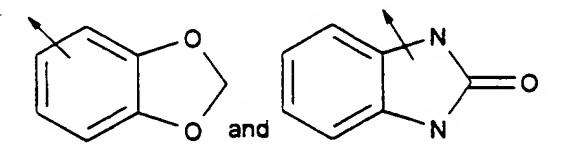
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...

attached to form

where Y² is C-X⁴ or N-X⁴;

 X^4 is $-(CH_2)_m-Y^3-X^5$ where m in the definition of X^4 is 0 or 1; and X^5 is selected from the group consisting of furanyl, benzyl, phenyl, amino,



4. A compound according to claim 1 wherein R¹ is H; R² is H; R³ is -CH₂-phenyl; R⁴ is -(CH₂)_m-A¹ where m in the definition of R⁴ is 0; R⁵ is phenyl; R⁶ is H; where A¹ is -C(=Y)-X²;

20 , Y is O; X^2 is $-(CH_2)_m-Y^1-X^3$;

where m in the definition of X2 is 0, 1 or 2;

Y1 is O, -NH-CO-, -CO-NH-, -NH-CO-O-CH2-, SO2 or a bond; and

X³ is methyl, furanyl, pentyl, phenyl, indolyl, p-NO₂-phenyl, naphthyl, fluorenyl,

-CH(phenyl)₂, benzothiazolyl, phthalamidyl, N,N-dimethylamino,

5. A compound according to claim 1 wherein R^1 is H; R^2 is H; R^3 is -CH₂-indol-3-yl; R^4 is -(CH₂)_m-A¹ where m in the definition of R^4 is 0; R^5 is phenyl or t-Bu; R^6 is H;

5 A^1 is $-C(=Y)-N(X^1X^2)$;

Y is O or S; X^1 is H; X^2 is $-(CH_2)_m - Y^1 - X^3$;

m in the definition of X^2 is 0, 1 or 2;

Y¹ is a bond; and X³ is phenyl, o-Cl-phenyl, m-Cl-phenyl, p-phenyloxy-phenyl, 2,6-di-isopropylphenyl, m-CF₃-phenyl, p-ethoxycarbonyl-phenyl, 2,4-difluorophenyl, m-NO₂-phenyl, p-benzyloxyphenyl, o-isopropylphenyl, n-hexyl, 4-

morpholino, naphthyl or

6. A compound according to claim 1 wherein R^1 is H; R^2 is H; R^3 is -CH₂-indol-3-yl; R^4 is -(CH₂)_m-A¹ where m in the definition of R^4 is 0; R^5 is phenyl or t-Bu; R^6 is H;

where A^1 is $-C(=Y)-X^2$;

Y is O; X^2 is $-(CH_2)_m - Y^1 - X^3$;

where m in the definition of X^2 is 0, 1 or 2;

 Y^1 is O, -CO-NH-, -NH-CO-O-CH₂-or a bond; and X^3 is methyl, 3-pentyl, phenyl, p-NO₂-phenyl, phthalamidyl, N,N-dimethylamino, p-aminophenyl, fluorenyl or

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7. A compound according to claim 1 wherein R^1 is H; R^2 is H; R^3 is -CH₂-indol-3-yl; R^4 is -(CH₂)_m-A¹ where m in the definition of R^4 is 0; R^5 is phenyl or t-Bu; R^6 is H;

where A^1 is $-C(=Y)-N(X^1X^2)$;

Y is O; X^1 is hydrogen; X^2 is $-(CH_2)_m-Y^1-X^3$; where m in the definition of X^2 is 0, 1, 2 or 3;

Y¹ is O, or a bond; and X³ is cyclopentyl, 4-OH-butyl, N,N-diethylamino. N-methyl-pyrrolidin-3-yl, -CH(ethoxy)₂, phenyl, p-SO₂NH₂-phenyl p-OH-phenyl, o-CF₃-phenyl, p-CJ-phenyl, -CH(phenyl)₂,

8. A compound according to claim 1 wherein R^1 is H; R^2 is H; R^3 is -CH₂-indol-3-yl; R^4 is -(CH₂)_m-A¹ where m in the definition of R^4 is 0; R^5 is phenyl or t-Bu; R^6 is H;

where A^1 is $-C(=Y)-X^2$;

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Y is O; X^2 is $-(CH_2)_m-Y^1-X^3$;

where m in the definition of X² is 0, 1, 2 or 3;

Y¹ is -NH-CO, -C=C-, -C≡C- or a bond; and X³ is t-butyl, 1-methylcarbonyl-piperidin-4-yl, phenyl, p-Cl-phenyl, m-CF₃-phenyl, 4-nitro-naphthyl, p-methoxy-phenyl, m-(phenylethyl)-phenyl, indol-3-yl or p-aminophenyl.

9. A compound according to claim 1 wherein R¹ is H; R² is H; R³ is -CH₂-indol-3-yl, -(CH₂)₄-NH-CO-O-t-Bu or -(CH₂)₄-NH₂; R⁴ is -(CH₂)_m-A¹ where m in the definition of R⁴ is 0; R⁵ is phenyl, o-methoxyphenyl, p-Br-phenyl, p-nitro-phenyl or p-N,N-diethylamino-phenyl; R⁶ is H;

where A^1 is $-C(=Y)-N(X^1X^2)$;

Y is O; X^1 is H; X^2 is $-(CH_2)_m-Y^1-X^3$;

where m in the definition of X² is 0;

Y¹ is a bond; and X³ is o-Br-phenyl, m-Br-phenyl, p-Br-phenyl, o-Cl-phenyl, m-Cl-phenyl, p-Cl-phenyl, o-nitro-phenyl, m-nitro-phenyl, p-nitro-phenyl, o-CF₃-phenyl, m-CF₃-phenyl, p-F-phenyl, 2,4-di-F-phenyl, 2,5-di-F-phenyl, 2,5-di-methoxy-phenyl, m-OMe-phenyl, p-OMe-phenyl, 2-CF₃-4-Cl-phenyl or 3-nitro-4-F-phenyl.

10. A compound according to claim 1 wherein R^1 is H; R^2 is H; R^3 is -CH₂-indol-3-yl, -(CH₂)₄-NH-CO-O-t-Bu or -(CH₂)₄-NH₂; R^4 is -(CH₂)_m-A¹ where m in the definition of R^4 is 0; R^5 is phenyl, o-methoxyphenyl, p-methoxyphenyl, p-Br-phenyl, p-nitro-phenyl or p-N,N-diethylamino-phenyl; R^6 is H;

30 where A^1 is $-C(=Y)-X^2$;

Y is O; X^2 is $-(CH_2)_m-Y^1-X^3$;

where m in the definition of X2 is 1;

Y¹ is a bond; and X³ is phenyl, o-Br-phenyl, m-Br-phenyl, p-Br-phenyl, o-Cl-phenyl, m-Cl-phenyl, p-Cl-phenyl, o-nitro-phenyl, m-nitro-phenyl, p-nitro-phenyl, o-CF₃-phenyl, m-CF₃-phenyl, p-CF₃-phenyl, o-F-phenyl, m-F-phenyl, p-F-phenyl, N,N-di-methylamino-phenyl, o-OMe-phenyl, m-OMe-phenyl, p-OMe-phenyl, 3,4-di-Cl-phenyl, 3,4,5-tri-OMe-phenyl, p-Me-phenyl, p-OH-phenyl or 2,4-di-F-phenyl.

- 11. A compound according to claim 9 wherein R⁵ is phenyl and R³ is -(CH₂)-indol-3-yl and the stereochemistry at the carbon to which R³ is attached is the R-configuration.
- 12. A compound according to claim 10 wherein R⁵ is phenyl and R³ is -(CH₂)-indol-3-yl and the stereochemistry at the carbon to which R³ is attached is the R-configuration.
- 13. A compound according to claim 10 wherein R⁵ is o-OMe-phenyl and R³ is -(CH₂)-indol-3-yl and the stereochemistry at the carbon to which R³ is attached is the R-configuration.
- 14. A compound according to claim 10 wherein R⁵ is o-OMe-phenyl and R³ is -(CH₂)-indol-3-yl and the stereochemistry at the carbon to which R³ is attached is the S-configuration.
- 15. A compound according to claim 1 wherein R¹ is H; R² is H; R³ is -(CH₂)₄NH-CO-O-t-Bu or -(CH₂)₄-NH₂; R⁴ is -(CH₂)_m-A¹ where m in the definition of R⁴ is 0; R⁵ is phenyl; R⁶ is H;

where A^1 is $-C(=Y)-X^2$;

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Y is O; X^2 is $-(CH_2)_m-Y^1-X^3$;

where m in the definition of X^2 is 0, 1 or 2;

Y¹ is S, SO₂ or a bond; and X³ is phenyl, 3,4-di-Cl-phenyl, 3,4,5-tri-OMe-phenyl, p-Me-phenyl, p-OH-phenyl, 2,4-di-F-phenyl, 2-furanyl, 2-pyridinyl, 3-pyridinyl, naphthyl, 2-quinolinyl, 3-quinolinyl, 4-quinolinyl, 8-quinolinyl, 1-isoquinolinyl, 2-thiophene or 2-pyrimidinyl.

16. A compound according to claim 1 wherein R¹ is H; R² is H; R³ is -(CH₂)₄
NH-CO-O-t-Bu or -(CH₂)₄-NH₂; R⁴ is -(CH₂)_m-A¹ where m in the definition of R⁴ is 0; R⁵ is phenyl; R⁶ is H;

where A^1 is $-C(=Y)-X^2$;

Y is O; X^2 is $-(CH_2)_m - Y^1 - X^3$;

wh r m in the definition of X^2 is 0, 1, 2 or 3;

Y¹ is a bond; and X³ is 5-indolyl, 3-indolyl, 4-indolyl, 2-indolyl, 5-OMe-indol-3-yl, 5-OMe-indol-3-yl, 5-OH-indol-3-yl, 5-DH-indol-3-yl, 5-Br-indol-3-yl, 2-Me-indol-3-yl, 2-benzothiophene, 3-benzothiophene or 2-benzofuran.

17. A compound according to claim 1 wherein R¹ is H; R² is H; R³ is -(CH₂)_m-5 indol-3-yl, -(CH₂)₄-NH-CO-O-t-Bu or -(CH₂)₄-NH₂; R⁴ is -(CH₂)_m-A¹ where m in the definition of R⁴ is 0; R⁵ is phenyl, o-OMe-phenyl or p-OMe-phenyl; R⁶ is H;

where A1 is X2;

 X^2 is $-(CH_2)_m - Y^1 - X^3$;

where m in the definition of X2 is 1, 2 or 3;

Y¹ is S, O or a bond; and X³ is phenyl, o-OH-phenyl, p-OH-phenyl, o-F-phenyl, 10 m-F-phenyl, p-F-phenyl, o-CF₃-phenyl, o-OMe-phenyl, m-OMe-phenyl, o-nitrophenyl, p-nitro-phenyl, 3,4-di-Cl-phenyl, 2-nitro-3-OMe-phenyl, o-Br-phenyl, m-2-thiophene, Br-phenyl, p-Br-phenyl, 3,4,5-tri-OMe-phenyl, p-N,Ndimethylamino-phenyl, p-OCF₃-phenyl, p-(3-(N,Ndimethylamino)propoxy)phenyl, 3-F-4-OMe-phenyl, 2-pyridinyl, 3-pyridinyl, 4-15 pyridinyl, 2-Cl-quinolin-3-yl, 2-quinolinly, methyl, n-butyl, n-pentyl, n-hexyl, 3,3dimethyl-butyl, benzyl, cyclohexyl or p-t-Bu-phenyl.

18. A compound according to claim 1 wherein R^1 is H; R^2 is H; R^3 is -(CH₂)₄-NH-CO-O-t-Bu or -(CH₂)₄-NH₂; R^4 is -(CH₂)_m-A¹ where m in the definition of R^4 is 0; R^5 is phenyl; R^6 is H;

where A1 is X2:

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 X^2 is $-(CH_2)_m-Y^1-X^3$;

where m in the definition of X² is 1, 2 or 3;

Y¹ is O or a bond; and X³ is phenyl, o-OH-phenyl, p-OH-phenyl, o-F-phenyl, m-F-phenyl, p-F-phenyl, o-CF₃-phenyl, o-OMe-phenyl, m-OMe-phenyl, p-OMe-phenyl, o-nitro-phenyl, p-nitro-phenyl, 3,4-di-Cl-phenyl, 2-nitro-3-OMe-phenyl, o-Br-phenyl, p-Br-phenyl, p-phenyl-phenyl, 2-thiophene, 3,4,5-tri-OMe-phenyl, p-N,N-dimethylamino-phenyl, p-benzyloxy-phenyl, p-OCF₃-phenyl, p-(3-(N,N-dimethylamino)propoxy)phenyl, 3-F-4-OMe-phenyl, 2-pyridinyl, 3-pyridinyl, 4-pyridinyl, 2-Cl-quinolin-3-yl, 2-quinolinly, 3-indolyl, 6-methoxycarbonyl-indol-3-yl, 1-methyl-indol-3-yl, 2-methyl-indol-3-yl, methyl, n-butyl, n-pentyl, n-hexyl, 3,3-dimethyl-butyl, benzyl, cyclohexyl or p-t-Bu-phenyl.

19. A compound according to claim 1 wherein R^1 is -(CH_2)- $CO-Z^1$; R^2 is H; R^3 is -(CH_2)₄-NH-CO-O-t-Bu, -(CH_2)₄-NH-CO-O-benzyl, -(CH_2)-phenyl or -(CH_2)-indol-3-yl; R^4 is -(CH_2)_m-A¹ wh r m in the definition of R^4 is 0; R^5 is phenyl; R^6 is H;

where Z¹ is ethyl, phenyl, p-OMe-phenyl, p-phenyl, p-Cl-phenyl, p-Br-phenyl, p-N₃-phenyl, p-F-phenyl, m-nitro-phenyl, p-nitro-phenyl, p-CN-phenyl, 2,5-di-OMe-phenyl, 3,4-di-Cl-phenyl, N,N-dimethylamino-phenyl, 3-methyl-4-Cl-phenyl or naphthyl;

5 A^1 is $-C(=Y)-X^2$;

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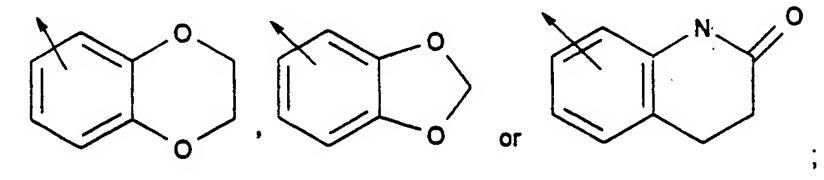
20

Y is O; X^2 is $-(CH_2)_m - Y^1 - X^3$;

where m in the definition of X^2 is 0;

Y¹ is O; and X³ is t-Bu.

- 20. A compound according to claim 1 wherein R^1 is -(CH_2)-CO-(CH_2)_m- Z^1 where m in the definition of R^1 is 0, 1 or 2; R^2 is H; R^3 is -(CH_2)-indol-3-yl or -(CH_2)₄-NH-CO-O-t-Bu; R^4 is H or -(CH_2)_m- A^1 where m in the definition of R^4 is 0; R^5 is phenyl, o-OMe-phenyl, p-nitro-phenyl, p-Br-phenyl, t-Bu, - $CH(CH_3)_2$ -CO-NH-(CH_2)₂-CO-O-t-Bu, - $CH(CH_3)_2$ -CO-NH-(CH_2)₃-imidazol-1-yl, - $CH(CH_3)_2$ -CO-NH-(CH_2)₂-pyridin-2-yl, - $CH(CH_3)_2$ -CO-NH-(CH_2)₃-4-morpholino, - $CH(CH_3)_2$ -CO-NH-(CH_2)-pyridin-4-yl or
 - -CH(CH₃)₂-CO-NH-(CH₂)₂-N,N-diethylamino; R⁶ is H; where Z¹ is ethyl, propyl, phenyl, p-OMe-phenyl, p-Cl-phenyl, p-Br-phenyl, p-F-phenyl, p-nitro-phenyl, m-nitro-phenyl, p-CN-phenyl, p-N₃-phenyl, p-phenyl-ph nyl, 3-Me-4-Cl-phenyl, p-N,N-diethylamino-phenyl, 2,5-di-OMe-phenyl, 3,4-di-Cl-ph nyl, 3,4-di-F-phenyl, p-OCF₃-phenyl, p-benzyloxy-phenyl, p-pentyl-phenyl, 3,4,5-tri-OMe-phenyl, 3-nitro-4-Cl-phenyl, 3-Cl-4-nitro-phenyl, 3-methyl-5-chloro-benzothiophen-2-yl, 2-benzofuranyl, 3-benzothiophene, 3-phenyl-isoxazol-5-yl, 3-(2,4-di-Cl-phenyl)-isoxazol-5-yl, 3-indolyl, 5-Br-thiophen-2-yl, naphthyl,



 A^{1} is -C(=Y)- X^{2} ;

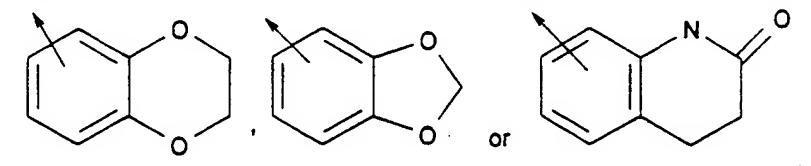
25 Y is O; X^2 is $-(CH_2)_m - Y^1 - X^3$;

where m in the definition of X2 is 0;

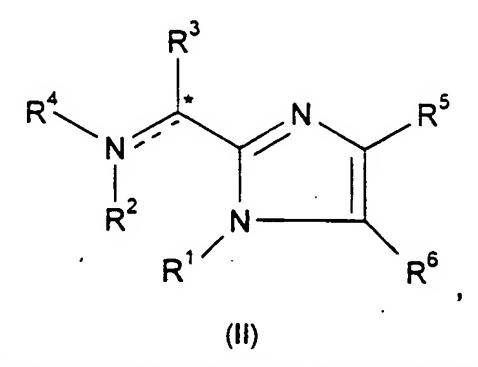
Y¹ is O; and X³ is t-Bu.

- 21. A compound according to claim 1 wherein R¹ and R² are taken tog ther to form a compound of formula (lb) or (lc);
- R³ is -(CH₂)-indol-3-yl, -(CH₂)-phenyl, -(CH₂)₄-NH-CO-O-benzyl or -(CH₂)₄-NH₂; R⁵ is ph nyl, o-OM -phenyl, p-OMe-ph nyl, p-Br-phenyl, p-nitro-phenyl, t-Bu or -CH(CH₃)₂-CO-NH-(CH₂)₂-NH₂; R⁶ is H;

R⁷ is ethyl, propyl, phenyl, p-OMe-phenyl, p-Cl-phenyl, p-Br-phenyl, p-F-phenyl, p-nitro-phenyl, m-nitro-ph nyl, p-CN-phenyl, p-N₃-phenyl, p-phenyl, p-phenyl, 3-Me-4-Cl-phenyl, p-N,N-diethylamino-phenyl, 2,5-di-OMe-phenyl, 3,4-di-Cl-phenyl, 3,4-di-F-phenyl, p-OCF₃-phenyl, p-benzyloxy-phenyl, p-pentyl-phenyl, 3,4,5-tri-OMe-phenyl, 3-nitro-4-Cl-phenyl, 3-Cl-4-nitro-phenyl, 3-methyl-5-chloro-benzothiophen-2-yl, 2-bezofuranyl, 3-benzothiophene, 3-phenyl-isoxazol-5-yl, 3-(2,4-di-Cl-phenyl)-isoxazol-5-yl, 3-indolyl, 5-Br-thiophen-2-yl, naphthyl,



22. A compound of the formula (II),



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the racemic-diastereomeric mixtures and optical isomers of said compound of formula (II), the pharmaceutically-acceptable salts or prodrugs thereof or a pharmaceutically acceptable salt of said prodrug,

15 wherein

----- represents an optional bond;

R¹ is H, $-(CH_2)_m-C(O)-(CH_2)_m-Z^1$, $-(CH_2)_m-Z^1$, $-(CH_2)_m-O-Z^1$ or $-(C_0-C_6)$ alkyl- $-(CO)-NH-(CH_2)_m-Z^3$;

 Z^1 is an optionally substituted moiety selected from the group consisting of (C_{1-} C₁₂)alkyl, benzo[b]thiophene, phenyl, naphthyl, benzo[b]furanyl, thiophene,

isoxazolyl, indolyl,

R² is H or (C₁-C₆)alkyl;

or R¹ and R² are taken together with the nitrogen atoms to which they are attached to form a compound of formula (IIa), (IIb) or (IIc),

 R^3 is $-(CH_2)_m-E-(CH_2)_m-Z^2$;

E is O, S,-C(O)-, -C(O)-O-, -NH-C(O)-O-, -N(C₁-C₆)alkyl-C(O)-O- or a bond;

Z² is H, (C₁-C₁₂)alkyl, amino, (C₁-C₁₂)alkylamino, N,N-di-(C₁-C₁₂)alkylamino, (C₁-C₁₂)alkylguanidino, or an optionally substituted moiety selected from the group consisting of phenyl, indolyl, imidazolyl, thiophene, benzothiophene, pyridinyl and naphthyl;

 R^4 is H or -(CH₂)_m-A¹;

10 A¹ is -C(=Y)-N(X¹X²), -C(=Y)-X², -C(=NH)-X² or X²;

Y is O or S;

20

 X^1 is H, (C_1-C_{12}) alkyl, $-(CH_2)_m$ -NH- (C_1-C_6) alkyl, $-(CH_2)_m$ -N-di- (C_1-C_6) alkyl or $-(CH_2)_m$ -aryl;

 X^2 is -(CH₂)_m-Y¹-X³ or optionally substituted (C₁-C₁₂)alkyl;

Y¹ is O, S, NH, C=O, (C₂-C₁₂)alkenyl having one or more double bonds, -NH-CO-, -CO-NH-, -NH-CO-O-(CH₂)_m-, -C=C-, SO₂ or a bond;

 X^3 is H, an optionally substituted moiety selected from the group consisting of (C_1-C_{12}) alkyl, (C_3-C_8) cycloalkyl, (C_1-C_{12}) alkoxy, aryloxy, (C_1-C_{12}) alkylamino, $N,N-di-(C_1-C_{12})$ alkylamino, $-CH-di-(C_1-C_{12})$ alkoxy, pyrrolidinyl, pyridinyl, thiophene, imidazolyl, piperidinyl, piperazinyl, benzothiazolyl, furanyl, indolyl, morpholino, benzo[b]furanyl, quinolinyl, isoquinolinyl, $-(CH_2)_m$ -phenyl, naphthyl, fluorenyl, phthalamidyl, pyrimidinyl,

or X^1 and X^2 are taken together with the nitrogen to which they are attached to form an optionally substituted moiety selected from the group consisting of thiazolyl,

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Y² is CH-X⁴, N-X⁴, -C(X⁴X⁴), O or S;

X⁴ for each occurrence is independently H or -(CH₂)_m-Y³-X⁵;

 Y^3 is -C(O)-, -C(O)O- or a bond;

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 X^5 is hydroxy, (C_1-C_{12}) alkyl, amino, (C_1-C_{12}) alkylamino, N,N-di- (C_1-C_{12}) alkylamino, or an optionally substituted moiety selected from the group consisting of aryl, aryl (C_1-C_4) alkyl, furanyl, pyridinyl, indolyl, piperidinyl, -CH(phenyl)₂,

 R^5 is (C_1-C_{12}) alkyl, (C_0-C_6) alkyl- $C(O)-O-Z^5$, (C_0-C_6) alkyl- $C(O)-NH-(CH_2)_m-Z^3$ or optionally substituted aryl:

$$H_2N-(C_1-C_6)$$
alkyl- $C(O)-O-(C_1-C_6)$ alkyl

optionally-substituted phenyl-(CH₂)_m-O-C(O)-NH-(C₁-C₆)alkyl——

(C(O)-O-(C₁-C₆)alkyl

or an optionally substituted moiety selected from the group consisting of imidazolyl, pyridinyl, morpholino, piperidinyl, piperazinyl, pyrazolidinyl, furanyl, phenyl, indolyl and thiophene, provided that when m is 0 in the formula for R^5 then Z^3 is not -NH-C(O)-O-(CH₂)_m-phenyl or -NH-C(O)-O-(CH₂)_m-(C₁-C₆)alkyl;

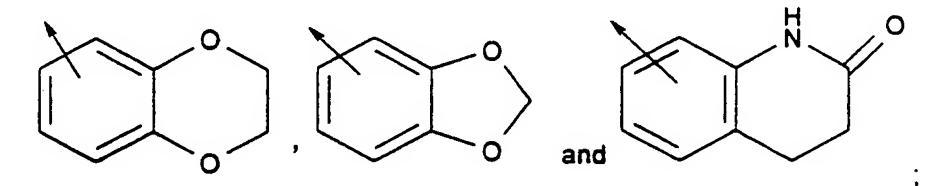
R⁶ is H or (C₁-C₆)alkyl;

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15 R^7 is (C_1-C_{12}) alkyl or $-(CH_2)_m-Z^4$;

Z⁴ is an optionally substituted moiety selected from the group consisting of phenyl, naphthyl, indolyl, thiophene, benzo[b]furan, benzo[b]thiophene, isoxazolyl,



 Z^5 is H, (C₁-C₁₂)alkyl, or -(CH₂)_m-aryl;

wherein an optionally substituted moiety is optionally substituted by one or more substituents, each independently selected from the group consisting of CI, F, Br, I, CF₃, CN, N₃, NO₂, OH, SO₂NH₂, -OCF₃, (C₁-C₁₂)alkoxy, -(CH₂)_m-phenyl-(X⁶)_n, -S-phenyl-(X⁶)_n, -S-(C₁-C₁₂)alkyl, -O-(CH₂)_m-phenyl-(X⁶)_n, -(CH₂)_m-C(O)-O-(C₁-C₆)alkyl, -(CH₂)_m-C(O)-(C₁-C₆)alkyl, -O-(CH₂)_m-NH₂, -O-(CH₂)_m-NH-(C₁-C₆)alkyl, -O-(CH₂)_m-N-di-((C₁-C₆)alkyl),

-(C_0 - C_{12})alkyl-(X^6)_n and -(CH_2)_m-phenyl- X^7 ;

 X^6 for each occurrence is ind pendently selected from the group consisting of hydrogen, CI, F, Br, I, NO₂, N₃, CN, OH, -CF₃, -OCF₃, (C₁-C₁₂)alkyl, (C₁-C₁₂)alkoxy, -(CH₂)_m-NH₂, -(CH₂)_m-NH-(C₁-C₆)alkyl, -(CH₂)_m-N-di-((C₁-C₆)alkyl) and -(CH₂)_m-ph nyl;

- X⁷ is -NH-C(=NH·HI)-X⁸, wherein X⁸ is thiophene, (C₁-C₆)alkyl or phenyl; m for each occurrence is independently 0 or an integer from 1 to 6; and n for each occurrence is independently an integer from 1 to 5; provided that:
- (a) when R^5 is (C_1-C_{12}) alkyl, or $-C(O)-O-Z^5$ and Z^5 is (C_1-C_{12}) alkyl or optionally substituted aryl; R^6 is H or (C_1-C_6) alkyl; R^7 is (C_1-C_{12}) alkyl or Z^4 and Z^4 is thiophene or optionally substituted phenyl, then R^3 is not $-C(O)-O-(CH_2)_m-Z$ where m is 0 and Z is H or (C_1-C_{12}) alkyl or where m is 1 to 6 and Z is H;
- (b) when R^5 is (C_1-C_{12}) alkyl or optionally substituted phenyl; R^6 is H or (C_1-C_6) alkyl; R^7 is (C_1-C_{12}) alkyl and R^3 is $-O-(CH_2)-Z^2$, then Z^2 is not an optionally substituted moiety selected from the group consisting of phenyl, indolyl, imidazolyl, thiophene, benzothiophene, pyridinyl, and naphthyl; and
- (c) when R^5 is H or (C_1-C_{12}) alkyl; R^6 is (C_1-C_6) alkyl; R^7 is (C_1-C_{12}) alkyl; and R^3 is $-O-Z^2$ or $-S-Z^2$, then Z^2 is not an optionally substituted moiety selected from the group consisting of phenyl, naphthyl, thiophene, benzothienyl and indolyl.
 - 23. A compound according to claim 22 of the formula

wherein

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or ; and

 Z^3 is -CH₂-NH₂, -(CH₂)₂-NH₂, -(CH₂)₃-NH₂ or

 X^1 is -(CH₂)₂-N(CH₃)₂ and X^2 is benzyl; or

25 X¹ and X² are taken together with the nitrogen atom to which they are attached, to form

24. A compound according to claim 22 of the formula:

5 wherein

 Z^3 is

 X^1 is $-(CH_2)_2-N(CH_3)_2$ and X^2 is benzyl; or

 X^1 and X^2 are taken together with the nitrogen atom to which they are attached, to form

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25. A compound according to claim 22 of the formula

wherein X^2 is p-chloro-phenyl, p-methoxy-phenyl, 2,4-difluoro-phenyl or thienyl.

26. A compound according to claim 22 of the formula

- 5 wherein X² is p-chloro-phenyl, p-methoxy-phenyl, phenyl or thienyl.
 - 27. A compound according to claim 22 of the formula

28. A compound according to claim 22 of the formula

10 29. A compound according to claim 22 of the formula

wherein

R⁵ is

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and R⁷ is m-nitro-phenyl or 2-phenyl-ethyl; or

$$R^5$$
 is and R^7 is ; or

 R^5 is N and N

and R⁷ is 3,4-dichlorophenyl or ; or

 R^5 is

and R⁷ is 3,4-dichlorophenyl.

- 30. A pharmaceutical composition comprising a compound according to claim 1 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.
 - 31. A method of eliciting an agonist effect from one or more of a somatostatin subtype receptor in a subject in need thereof, which comprises administering a compound according to claim 1 or a pharmaceutically acceptable salt thereof to said subject.
 - 32. A method of eliciting an antagonist effect from one or more of a somatostatin subtype receptor in a subject in need thereof, which comprises administering a compound according to claim 1 or a pharmaceutically acceptable salt thereof to said subject.

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33. A method of binding one or mor of a somatostatin subtype receptor in a subject in need thereof, which comprises administering a compound according to claim 1 or a pharmaceutically acceptable salt thereof to said subject.

- A method of treating acromegaly, restenosis, Crohn's disease, systemic 34. sclerosis, external and internal pancreatic pseudocysts and ascites, VIPoma, nesidoblastosis, hyperinsulinism, gastrinoma, Zollinger-Ellison Syndrome, diarrh a, AIDS related diarrhea, chemotherapy related diarrhea, scleroderma, Irritable Bowel pancreatitis, small bowel obstruction, gastroesophageal Syndrome, duodenogastric reflux, Cushing's Syndrome, gonadotropinoma, hyperparathyroidism, Graves' Disease, diabetic neuropathy, Paget's disease, polycystic ovary disease, cancer, cancer cachexia, hypotension, postprandial hypotension, panic attacks, GH secreting adenomas or TSH secreting adenomas, in a subject in need thereof, which comprises administering a compound according to claim 1 or a pharmaceutically acceptable salt thereof to said subject.
- 35. A method of treating diabetes mellitus, hyperlipidemia, insulin insensitivity, Syndrome X, angiopathy, proliferative retinopathy, dawn phenomenon, Nephropathy, peptic ulcers, enterocutaneous and pancreaticocutaneous fistula, Dumping syndrome, watery diarrhea syndrome, acute or chronic pancreatitis, gastrointestinal hormone secreting tumors, angiogenesis, inflammatory disorders, chronic allograft rejection, angioplasty, graft vessel bleeding or gastrointestinal bleeding in a subject in need thereof, which comprises administering a compound according to claim 1 or a pharmaceutically acceptable salt thereof to said subject.
- 36. A method of inhibiting the proliferation of helicobacter pylori in a subject in need thereof, which comprises administering a compound according claim 1 or a pharmaceutically acceptable salt thereof, to said subject.
- 37. A pharmaceutical composition comprising a compound according to claim 22 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.
- 38. A method of eliciting an agonist effect from one or more of a somatostatin subtype receptor in a subject in need thereof, which comprises administering a compound according to claim 22 or a pharmaceutically acceptable salt thereof to said subject.
- 39. A method of eliciting an antagonist effect from one or more of a somatostatin subtype receptor in a subject in need thereof, which comprises

administering a compound according to claim 22 or a pharmaceutically acceptable salt thereof to said subject.

- 40. A method of binding one or more somatostatin subtype receptor in a subject in need thereof, which comprises administering a compound according to claim 22 or a pharmaceutically acceptable salt thereof to said subject.
 - 41. A method of treating acromegaly, restenosis, Crohn's disease, systemic sclerosis, external and internal pancreatic pseudocysts and ascites, VIPoma, nesidoblastosis, hyperinsulinism, gastrinoma, Zollinger-Ellison Syndrome, diarrhea, AIDS related diarrhea, chemotherapy related diarrhea, scleroderma, Irritable Bowel Syndrome, pancreatitis, small bowel obstruction, gastroesophageal reflux, duodenogastric reflux, Cushing's Syndrome, gonadotropinoma, hyperparathyroidism, Graves' Disease, diabetic neuropathy, Paget's disease, polycystic ovary disease, cancer, cancer cachexia, hypotension, postprandial hypotension, panic attacks, GH secreting adenomas or TSH secreting adenomas, in a subject in need thereof, which comprises administering a compound according to claim 22 or a pharmaceutically acceptable salt thereof to said subject.

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- 42. A method of treating diabetes mellitus, hyperlipidemia, insulin insensitivity, Syndrome X, angiopathy, proliferative retinopathy, dawn phenomenon, Nephropathy, peptic ulcers, enterocutaneous and pancreaticocutaneous fistula, Dumping syndrome, watery diarrhea syndrome, acute or chronic pancreatitis, gastrointestinal hormone secreting tumors, angiogenesis, inflammatory disorders, chronic allograft rejection, angioplasty, graft vessel bleeding or gastrointestinal bleeding in a subject in need thereof, which comprises administering a compound according to claim 22 or a pharmaceutically acceptable salt thereof to said subject.
- 43. A method of inhibiting the proliferation of helicobacter pylori in a subject in need thereof, which comprises administering a compound according claim 22 or a pharmaceutically acceptable salt thereof, to said subject.